

MARTYNENKO, M.D.

Some boundary value problems in the theory of elasticity for regions with slits. Dop. AN URSR no.8:983-986 '63. (MIRA 16:10)

1. L'vovskiy gosudarstvennyy universitet. Predstavлено
академиком АН UkrSSR Ю. А. Митропол'sким [Mytropol's'kyi, I.U.O.].
(Boundary value problems) (Elasticity)

MARTYNNENKO, M.D.

Determining the zero-moment shape of a shell under a given external load. Vop. mat. fiz. i teor. funk. no.1:91-96 '64.

(MIR 18:2)

MARTYNEŃKO, M. D.

Second boundary value problem in the theory of elasticity for a
homogeneous isotropic layer. Dokl. AN SSSR 156 no. 1:1323-1325
Je '64. (MIRA 17:8)

1. L'vovskiy gosudarstvennyy universitet imeni Ivana Franko.
Predstavлено академиком A. Ju. Iščinskim.

L 16053-66 EWT(d) IJP(c)
ACC NR: AT6003594

SOURCE CODE: UR/3185/65/000/001/0025/0033

AUTHOR: Martyrenko, M. D.

26

ORG: none

B+1

TITLE: Basic boundary problems in the elasticity theory for slit-containing regions

SOURCE: Lvov. Universytet. Visnyk. Seriya mekhaniko-matematychna, no. 1, 1965, 25-33

TOPIC TAGS: Riemann space, boundary value problem, Green function, elasticity theory,
integral equation

ABSTRACT: Multivalued potentials are convenient for solving boundary problems for
slit-containing regions using the method of integral equations. The author introduces the
Green's function into appropriate Riemannian spaces and using the second Green's
identity establishes multivalued potentials for the first and second boundary problems of the
elasticity theory. The starting point is the Lamé system of equations for an equilibrated
uniform isotropic elastic medium, and the potentials reduce the basic boundary problems
into equivalent integral equations which are then proved to be solvable. As an example
the author investigates a simple region comprising the entire three-dimensional space
with a cut along a nonclosed Lyapunov-type surface bounded by a smooth curve. Orig.
art. has: 27 formulas.

Card 1/2

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LJ6053-66

ACC NR: AT6003594

SUB CODE: 12, 20 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 001

Card 2/2

MARTYNEKO, M.S.

Fundamental boundary value problem in the plane theory of elasticity for regions with slits. Doc. AN Ukr. SSR 195-92 '75.

(MIRA 18:7)

i. Lvovskiy gosudarstvennyy universitet.

L 16155-66

EWT(d)

LJP(c)

ACC NR: AF5024778

SOURCE CODE: UR/0021/65/000/009/1125/1128

AUTHOR: Martynenko, M. D.

21

B

ORG: State University of Lviv (Lviv's'kyj derzhavnyj universytet)TITLE: Boundary value problem for elliptical equation of the second order

SOURCE: AN UkrRSR. Dopovidi, no. 9, 1965, 1125-1128

TOPIC TAGS: boundary value problem, elliptic differential equation, integral equation, second order equation

ABSTRACT: The elliptic equation

$$L[u] = \sum_{l,k=1}^3 \frac{\partial}{\partial x_l} \left(a_{lk} \frac{\partial u}{\partial x_k} \right) + \sum_{l=1}^3 b_l \frac{\partial u}{\partial x_l} + cu = 0$$

Card 1/2

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L 16155-66
ACC NR: AP5024778

is considered where $a_{ik} = a_{ki} \in C^{(1, \lambda)}$ and $b_i, c \in C^{(0, \lambda)}$. Moreover, it is assumed that a_{ik} satisfy uniformly in E_3 the Holder condition with exponent λ and that the discriminant of the quadratic form $\sum_{i,k=1}^n a_{ik} t_i t_k$ is bounded below and

o
e.g. d. The author gives a method for solving the boundary value problem of this type of equation for the case of given boundary conditions on the two sides of non-convex and non-Maximov type bounded by a smooth curve. A method of reducing the given problem to the regular integral equation is also indicated. Orig. art. Mat. 5 formulas.

SUB CODE: 12/ SUBM DATE: 01Oct64/ ORIG REF: 004

Card 2/2

L-25163-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(k)/EWA(h) pf-4/peb EM
ACCESSION NR: AT5002841 S/3123/64/000/001/0091/0096 2D
B71
Bx1

AUTHOR: Martynenko, M. D.

TITLE: Determination of the momentless shape of shells subjected to given external loads
2D

SOURCE: AN UkrSSR. Institut matematiki. Voprosy matematicheskoy fiziki i teorii funktsiy, no. 1, 1964, 91-96

TOPIC TAGS: shell theory, momentless shell, shell bending stress, axially symmetric shell, loaded shell

ABSTRACT: The study of shells which maintain zero bending stresses under given external loads is of considerable practical interest. The present paper studies both the external load which, for a given shell shape, does not generate bending stresses, and the shell shape which, for given external loads, remains momentless. The approach to the problem may be described as follows. An axially symmetric shell bounded by planes perpendicular to the axis of rotation is deformed by a symmetric load lying in the meridional plane and acting on the surface and edges of the shell. The possible shapes of shells of constant or variable thickness which result in membrane stresses only are then determined. The results of the calculations suggest two simplest cases which are then briefly examined. One

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L 25163-65
ACCESSION NR: AT5002841

corresponds to a uniformly distributed normal pressure. The second case, studied earlier by M.R. Horne (J. Mech. and Phys. Solids, 2, no. 2, 1954), corresponds to a uniform distribution of forces parallel to the axis of symmetry along the edges. "The author thanks Prof. M.P. Sheremet'ev for suggesting the problem and giving valuable advice." Orig. art. has: 26 formulas and 1 figure.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: AS, ME

NO REF Sov: 003

OTHER: 001

Card 2/2

MARTYNEK, M.S. (Martynenko, M.S.)

Sensitivity of the sublingual salivary gland in dogs, Pis. v.
zhur. [ukr.] 8 no. 4678-480 S-6 '61.

1. Katedra zoologii Uman'skogo pedagogicheskogo instituta.

MARTYINOV, N. I.

MARTYINOV, N. I.: "The effect of the functional state of the nervous system on the course of vertebrate sexual return." Berlin, 1951. Ann. of the Inst. of Physiology and I. I. Pavlov. (Bibliography from: Berry, A. Candidate of Biological Sciences)

CC: Knizhnaya Lett.^{izd.} No. 45, 14 November 1951. Moscow.

MARTYNIENKO, M.P. (Leningrad)

Effect of parathyroid gland removal on conditioned vascular reflexes in dogs. Probl.endok. i gorm. 5 no.3:32-38 My-Je '59. (MIRA 12:9)

1. Iz laboratorii fiziologii zhelez vnutrenney sekretsii (zav. - chlen-korrespondent AMN SSSR prof.Ye.N.Speranskaya) Instituta fiziologii imeni I.P.Pavlova Akademii nauk SSSR (dir. - akademik K.M.Bukov [deceased]).

(PARATHYROID GLANDS, eff. of excis.
on cond. vasc. reflexes in dogs (Rus))
(REFLEX, CONDITIONED
cond. vasc. reflexes, eff. of parathyroid
gland excis. in dogs (Rus))
(BLOOD VESSELS, physiol.
same)

MARTYNENKO, M.P..

Calcium level in the blood and reaction to adrenaline of the
nictitating membrane of cats. Trudy Inst.fiziol. 8:385-387
'59. (MIRA 13:5)

1. Laboratoriya fiziologii zhelez vnutrenney sekretsii (zavedu-
yushchaya - Ye.N. Speranskaya) Instituta fiziologii im. I.P.
Pavlova AN SSSR.
(CALCIUM IN THE BODY) (ADRENALINE) (EYELIDS)

MARTYNEKO, M.P.

Effect of the action of bromide and caffeine on the central nervous system on the course of parathyroid tetany in dogs. Fiziol. zhur. 45 no.5:585-592 My '59. (MIRA 12:7)

1. Laboratoriya fiziologii zhelez vnutrenney sekretsii Instituta fiziologii im. I.P. Pavlova AN SSSR, Leningrad.

(TETANY, exper.

efl. of bromides & caffeine in dogs (Rus))

(BROMINE, eff.

on exper. tetany in dogs (Rus))

(CAFFEINE, eff.

same)

BARD, J., M.D., PH.D., M.F.P., M.R.C.P., M.R.C.PATH.

Two cases of primary hypoparathyroidism due to
carotid parathyroid insufficiency. New England Journal of Medicine
AN SSR no. 247-11-166. MARCH 1961.

1. Laboratory findings in a woman with primary hypoparathyroidism.
Y. N. Speransky, et al. New England Journal of Medicine 264: 197-201, 1961.

BOYKO, N.; YATSENKO, M.; LIZOGUB, M.; GLUSHKO, Ye.; MARTYNNENKO, E.

In the progressive rural savings banks. Fin. SSSR 21 no.12:68-72
D '60. (MIRA 13:12)

1. Kontroler sberegatel'noy kassay sela Medvezh'ye Talayevskogo rayona (for Boyko). 2. Kontroler sberkassy sela Zhigaylovka (for Yatsenko). 3. Kontroler sberkassy sela Osoyevka Krasnopol'skogo rayona (for Lizogub). 4. Kontroler sberkassy sela Khoruzhevki Nedrigaylovskogo rayona (for Glushko). 5. Kontroler sberkassy Aktyrskogo rayona No.2833/01 (for Martynenko).

(Savings banks)

MARTYHANKO, N.A.

Asymmetry of the genital organs in swine. Vop. fiziol. no.10:137-145
'54 (MLRA 10:5)

1. Institut fiziologii im. A.A. Bogomol'tsa Akademii nauk USSR,
Laboratoriya fiziologii sel'skokhozyaystvennykh zhivotnykh.
(SWINE--ANATOMY)
(GENERATIVE ORGANS, FEMALE--ABNORMALITIES AND DEFORMITIES)

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8

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RECORDED IN 1968 BY MURKIN & CO. INC.

1. Name and location of the facility during simulation of the
missile launch. (Government system) Rizal, province of Rizal,
Philippines. JI AR 26.

MIRA TOWER

2. Name of the organization or government activity of Man and Animals at the
facility during simulation of the missile launch. Academy of Sciences of the
USSR, Riga, Latvia.

L 684-64

ACCESSION NR: AP3005996

S/0238/63/009/004/0553/0555

AUTHOR: Martyshenko, N. A.

X13

TITLE: Chronic implantation of electrodes in cat brains by use of stereotactic apparatus

SOURCE: Fiziologichnyy zhurnal, v. 9, no. 4, 1963, 553-555

TOPIC TAGS: brain stimulation, electrophysiology, implanted electrode, surface type electrode, stereotactic apparatus

TRANSLATION: Various electrodes for chronic stimulation of sections of the brain and derivation of potentials have been described by numerous authors. It is only recently that models have been developed by electrophysiologists whereby existing methods can be modified and new ones devised. The plastic design of the implanted and surface-type electrodes which the author studied offers certain advantages over conventional varieties. The design is simple, including a plexiglass base, socket bushings, electrode and acryl plate affixed to the skull by plexiglass screws; there is minimal weight and maximal stability. These new methods offer substantial advantages in mechanical maneuverability, sterilization

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L 684-64

ACCESSION NR: AP3005996

properties, and convenience in use. Three illustrations.

ASSOCIATION: Laboratoriya vyshchoy nervovoy diyal'nosti lyudy i tvaryn Instytutu fiziologii im. O. O. Bohomol'tsya Akademii nauk UkrSSR, Kiev (Laboratory for Higher Nervous Activity in Humans and Animals, Institute of Physiology, AN UkrSSR)

SUBMITTED: 14Sep62

DATE ACQ: 21Aug63

ENCL: 00

SUB CODE: AM

NO REF SOV: 004

OTHER: 003

Card 2/2

MARTYNNENKO, N.A.

Elasticity and strength of the transparent membrane of ovicells in cattle as an index of their biological inequality and heterogeneity. Fiziol.zhur. [Ukr.] 11 no.4:432-436 Jl-Ag '65.

(MIA 18.10)

1. TSentral'naya opytnaya stantsiya iskusstvennogo osemeneniya sel'skokhozyaystvennykh zhivotnykh Ministerstva sel'skogo khozyaystva UkrSSR.

MARTYNENKO, N.A.

Method for the determination of live and dead cells. P. 1, 1965
[Ukr.] 11 no.4:550-551 Jl-Az '65.

1. Tsentral'naya issledovatel'skaya stantsiya iekspertizy i
osemeneniva sel'skokhozyaystvennykh zhivotnykh Minsisternika
sel'skogo khozyaystva UkrSSR.

MARTYNEENKO, N. I.

MARTYNEENKO, N. I.: "Some problems of the agricultural engineering of tomatoes in Kustanay Oblast." Min High r Education (S. . Kazakh Agricultural Inst. Alma-Ata, 1956. (Dissertation for the Degree of Candidate in Agricultural Sciences)

Source: Knizhnaya letopis' No. 26 1956 Moscow

MARTYNNENKO, N.V.

Using silicon voltage stabilizing tubes in rated voltage
voltmeters. Izm. tekhn. no.8:39-41 Ag '63. (MIRA 16:10,

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8

MARTYNNENKO, N.V.

Designing the circuit of a short dynamic parameter. Izm.techn.
no.9:36-39 S '65. (MRA 18:10)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8"

RECORDED IN THE NAME OF THE SOVIET SCIENTIFIC AND INDUSTRIAL

INSTITUTE OF POLYMER CHEMISTRY, KIEV, U.S.S.R. [REDACTED] MARCH 1984

RECORDED IN THE NAME OF THE SOVIET SCIENTIFIC AND INDUSTRIAL INSTITUTE OF POLYMER CHEMISTRY, KIEV, U.S.S.R. [REDACTED] MARCH 1984

FUDEL'IOSPOVA, S.T.; MARTYNNENKO, O.A.

Formation of a membrane potential in the early period of
ontogenesis and its connection with the size of the muscle
fiber. Biophysika d no.1:45-49 '67. (M RA 17:8)

1. Institut gerontologii i eksperimental'noy patologii AN
SSSR, Kiyev.

FUDEL'-OSIPOVA, S.I.; MARTYNENKO, O.A.

Change in the water-salt composition of the muscles of rats in
ontogeny. Biofizika 10 no.5:796-800 '65.

(MIRA 18:10)

1. Laboratoriya biologii Instituta gerontologii AMN SSSR, Kiyev.

MARTYNENKO, O.G., aspirant

Designing a heat exchanger with a minimum total front area
for a gas-turbine engine of a given economic efficiency.
Izv. vys. ucheb. zav.; mashinostr. no.10:134-142 '63.
(MIRA 17:3)

1. Moskovskiy avtomekhanicheskiy institut.

+ 10000 years - MARTYNENKO

L 8835-68 EWT(1)/ETC/EPF(n)-2/EWG(m) WW UR/0000/65/000/000/0143/0147 66
ACC NR: AT5027200
AUTHOR: Ayerov, V.Ye.; Martynenko, O.G.; Revzin, I.S.; Fedorov, B.I.
ORG: Heat and Mass Transfer Institute, AN BSSR, Minsk (Institut teplo-
i massoobmena AN BSSR)
TITLE: Effect of the turbulizing of a stream of air on heat transfer
in a radiator
SOURCE: AN BSSR. Institut teplo- i massoobmena. Teplo- i massoobmen-
tel s okruzhayushchey gazovoy sredoy (Heat and mass exchange of bodies
with the surrounding gaseous medium). Minsk, Nauka i Tekhnika, 1965,
143-147
TOPIC TAGS: heat transfer, engine radiator, turbulent heat transfer
ABSTRACT: Existing experimental data show that the use of a previously
turbulized stream of air in various types of industrial heat exchangers
can substantially increase their efficiency. Experiments were carried
out on heat exchange in an oil radiator of the automobile type, with
different degrees of turbulizing of the stream of air being blown through
it. Hot oil from the lubricating system of a motor was circulated
through a tube plate radiator. The article shows a sketch of the

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L 8835-66

ACC NR: AT5027200

experimental setup. At constant loads and constant revolutions of the motor and the fan, measurements were made of the temperature of the walls of the radiator tubes as well as of the temperature of oil and air at the inlet and outlet of the radiator. In addition to the temperature measurements, determinations were made of the velocity field and the degree of turbulence of the stream of air before and after the radiator. Thermodynamic calculations based on the experimental data show that the efficiency of a radiator using a "pusher" fan increased by 25% on the average. The authors conclude that the installation of "pusher" fans on transport vehicles would permit a significant reduction in the size and weight of the radiator, which would make possible a substantial saving of nonferrous metal. Orig. art. has: 3 figures and 1 table

SUB CODE: ME/ SUBM DATE: 02Jul65/ ORIG REF: 004 OTH REF: 003

AVK
Card 2/2

KIZUB, F.; SHCHEKUTEV, Ya.; REPICHEV, A.; KOROSTELEV, I.; MARTYNENKO, P.
TARANIK, F.; TYRINOV, P.; PCPOVKIN, N.

Hidden potentialities for the economy of working time. Den. i
kred. 19 no.3:50-62 Mr '61. (MIRA 14:3)

1. Zamestitel' glavnogo bukhgaltera Ukrainskoy respublikanskoy kontory Gosbanka (for Kizub). 2. Glavnny bukhgalter Ryazanskoy oblastnoy kontory Gosbanak (for Shchekutev). 3. Glavnny bukhgalter Starorusskogo otdeleniya Gosbanka Novgorodskoy oblasti (for Repichev). 4. Glavnny bukhgalter Gul'kevichskogo otdeleniya Gosbanka Krasnodarskogo kraya (for Korostelev). 5. Zamestitel' glavnogo bukhgaltera Krasnoyarskoy krayevoy kontory Gosbanka (for Martynenko). 6. Glavnny bukhgalter Pereyaslav-Khmel'nitskogo otdeleniya Gosbanka Kiyevskoy oblasti (for Taranik). 7. Glavnny bukhgalter Tonshayevskogo otdeleniya Gosbanka Gor'kovskoy oblasti (for Tyrinov). 8. Glavnny bukhgalter Novo-Ukrainskogo otdeleniya Gosbanka Kirovogradskoy oblasti.

(Banks and banking--Accounting)
(Machine accounting)

MARTYNEKO, P.T.

Clay-gypsum attic floor coverings. Gidr.i mel. 8 no.4:49-50 Ap '56.
(MLRA 9:8)

1. Brigadir plotnikov SMK No. 4.
(Floor coverings)

MARTYNENKO, P.Ye.

Opaline rock as an acid hydraulic admixture. Izv. AN Kazakh. SSR
Ser.gor.dela. met. i stroimat. no.2:71-77 '54. (MLRA 9:6)
(Pozzuolanas) (East Kazakhstan--Opals)

MINAS, A.I., kandidat tekhnicheskikh nauk; MARTYNEKO, P.Ye.,
kandidat tekhnicheskikh nauk.

Binding materials from powdered calcium carbide. Vest. AN
Kazakh. SSR 11 no.9:92-97 3 '54. (MLRA 8:2)
(Calcium carbide)

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8"

MARTYNEVSKO P.E.

Utilization of powdered carbide lime in construction.
A. I. Minas and P. E. Martynenko. *Izvzd. Akad. Nauk Kazakh S.S.R., Ser. Gornogo Dela, M., i Stroimaterial.* 1955, No. 5, 132-42 (in Russian).—Powd. carbide lime differs from structural hydrated lime in size and shape of grains and, possibly, in properties of its surface layers. Structural mixts. made from carbide lime have a lower plasticity and strength (after hardening) than structural hydrated lime. Powd. carbide lime can be used, without processing, in cement-lime structural mixts. as a substitute for structural lime. Wet grinding improves bonding characteristics of carbide lime.

B. Z. Kurnich

2

M. A. I. ; M. Ye.

MINAS. A.I.; MARTYNENKO, P.Ye.

Thin-walled semicylindrical brick silos and reinforced concrete
trenches. Izv.AN Kazakh.SSR.Ser.gor.dela, met., stroi. i stroimat.
no.10:18-29 '56. (MLRA 10:1)
(Soils) (Building, Brick) (Reinforced concrete construction)

MARTYNENKO, R.

Practice in studying the structure and establishing norms for the number of administrative personnel in machinery manufacturing plants. Biul.nauch. inform.: trud i zar. plata > no.1:33-39 '62.
(MIRA 15:2)
(Kharkov Province--Machinery industry)

MARTYNEK, Roman Dmitrievich -

BELEN'KIY, Aleksandr Davydovich; BOGDANOV, Ivan Danilovich; YEROSHIN,
Mikhail Mikhaylovich; ~~MARTYNEK, Roman Dmitrievich~~; RAKHMATULIN,
M.D., inzhener, redaktor; VERINA, G.P., tekhnicheskiy redaktor

[Eliminating defects in locomotives] Ustranenie neispravnostei
teplovoza. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 102 p.
(MIRA 10:9)

(Locomotives--maintenance and repair)

BELEN'KIY, Aleksandr Davydovich; BOGDANOV, Ivan Danilovich; YEROSHIN,
Mikhail Mikhaylovich; MARTYNEKO, Roman Dmitriyevich;
RAKHMATULIN, M.D., inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Eliminating malfunctions in diesel locomotives] Ustranenie
neispravnostei teplovoza. Izd.2., ispr. i dop. Moskva,
Gos.transp.zhel-dor.izd-vo, 1959. 156 p. (MIRA 13:1)
(Diesel locomotives--Handbooks, manuals, etc.)

L 17840-65 EWT(1)/EWT(m)/EPP(c)/EPP(n)-2/EPA(w)-2/EEC(t)/EEC(b)-2/EWA(m)-2 Pr-l/
Fab-10/Fu-4 AS(mp)-2/SSD/AFWL/AFTG(b)/ESD(t) CG
ACCESSION NR: AP5000159 S/0032/64/030/012/1470/1473

AUTHORS: Stoyanova, I. G.; Martynenko, T. P.

TITLE: A study of the radiation damage to electron microscope objectives as a function of the research conditions B

SOURCE: Zavodskaya laboratoriya, v. 30, no. 12, 1964, 1470-1473

TOPIC TAGS: electron microscope, electron microscopy, radiation damage

ABSTRACT: The effect of various research conditions on the radiation damage to electron microscope objectives was studied experimentally. The damage to the test objectives (monocrystals of low pressure polyethylene) was investigated using the methods developed by I. G. Stoyanova and T. P. Morozova (Doklady AN SSSR, 148; 810, 1963). A minimum time (10-70 sec, depending on conditions) in which no noticeable damage occurred was observed. The type and pressure of gas in the electron microscope was found to have a large effect on the damage. Analysis showed that the charge accumulated on the surface of the objective contributed to the objective damage and that, if these charges were compensated by ionized molecules, the damage was lessened. Least damage was therefore experienced with inert gases (oxygen in the air damaged the objective) at pressures sufficient to

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L 17810-65

ACCESSION NR: AP5000159

provide the necessary amount of ionization for total compensation. The damage also varied with the irradiated area, being of a maximum for medium-sized areas, due to the charge accumulation (small areas would not accumulate sufficient charge, large areas permitted more complete compensation). With small doses (up to 10^6 roentgens/sec) there was no observable "after-effect" radiation damage, but at higher dosages damage was found to increase linearly with time after the radiation had been terminated. By establishing experimental conditions in accordance with the findings of the paper, the electron microscope objective radiation damage can be minimized. Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: OP

NO REF Sov: 003

OTHER: 001

Card 2/2

YEFIMENKO, G.G., inzh., VOYTANIK, S.T., inzh.; YEFIMOV, S.P., inzh.; MACHKOVSKIY, A.I., inzh.; RUDKOV, A.K., inzh., RUDKOVSKIY, G.I., inzh., Prinimali uchastiye: Koval'ev, N.A., Gotovtsev, A.A.; Vasil'yev, V.S.; Zemlyanoy, A.A.; Kukushkin, S.N.; Matyna, M.G.; Lovchanovskiy, V.A.; Kramnik, T.A.; Nechesova, N.I.; Martynenko, V.A.; Kuraksin, D.I.; Letyagin, N.L.

Intensifying the sintering process by the use of a special charge wetting device. Stal' 23 no.12:1061-1064 D (1963) (MIRA 17:2)

1. Dnepropetrovskiy metallurgicheskiy institut, zavod im. Dzerzhinskogo i Yuzhnyy gornoobogatitel'nyy kombinat.
2. Dnepropetrovskiy metallurgicheskiy institut (for Kovalev, Gotovtsev, Vasil'yev, Zemlyanoy, Kukushkin).
3. Zavod im. Dzerzhinskogo (for Matyna, Lovchanskiy, Kramnik, Nechesova).
4. Yuzhnyy gornoobogatitel'nyy kombinat (for Martynenko, Kuraksin, Letyagin).

RUDOVSKIY, G.I.; MARTYNEKO, V.A.

Improving the ignition hearth. Metallurg 10 no.12:11-12
D '65. (MIRA 18:12)

1. Yuzhnnyy gornoobogatitel'nyy kombinat.

MARTYNAKEL', Vera Antonovna; GUS'KA, S., 1962.

[Medicinal plants of the Komi ASSR. Syktyvkar, Komi Nauka, 1962. 12 p. 12 cm.]

SOYFER, V.M., inzh.; MARTYNEKHO, V.F., inzh.

Efficient capacity of steel-pouring ladies. Lit. press.
no.11:36 N '65. (MIRA 18:12)

OZHIGANOV, I.N.; MARYANKO, V.G.

Colorimetric determination of phenols in concentrated phenolic and
waste waters of b.product coke plants by means of pyramidon. Koks
i khim. no.2:41-44 '61. (MIA 14:2)

1. Donbasvodtrest.
(Phenols)

(Coke industry—By-products)

OZHIGANOV, I.N., inzh.; MARTYnenko, V.G., inzh.

Using polyacrylamide for the purification of waste waters from ferrous metal plants. Vod. i san. tekh. no. 9814-16 - '63. (MIRA 17:2)

TARYMENKU, V.G., inzhener.

Railroad electrification requires first-rate track. But it must.

Trans. no.8: 3-4 Ag '57

(XLRK . .9)

(Railroad-Track)

BRI~~YUK~~, G.P., kand. tekhn. nauk (Novosibirsk); MARTY~~NENKO~~, V.G., inzh.
(Novosibirsk); KENASHKINA, Z.I., inzh. (Novosibirsk)

What is a ground swell? Put' i put. khoz. no. 10:36 0 '57.
(Railroads--Maintenance and repair) (MLRA 10:11)

УДАЧИ ВАМ ВСЕМ!

BREDYUK, G.P., kand.tekhn.nauk; MARTYNEKO, V.G., inzhener.

Eliminating deformations in the earth road bed on the railroads
of Western Siberia. Zhel.dor.transp. 39 no.9:64-68 S '57.
(MIRA 10:10)
(Siberia, Western--Railroads--Earthwork)

BREDYUK, G.P., kand. tekhn. nauk; MARTYNEKO, V.G., inzh.; YAKUBOVA, A.A.,
inzh.

Control of ground swelling. Put' i put. khoz. no.1:5-7 Ja '58.
(Railroads--Earthwork) (Soil mechanics) (MIRA 11:1)

MARTYNNENKO, V.I.; IVANOVA, V.I.

Role of molybdenum in the increase of pea yields. Zemledelie 24
no.2:72-74 F '62. (MIRA 15:3)

I. Khmel'nitskaya oblastnaya gosudarstvennaya sel'skokhozyaystvennaya
opytnaya stantsiya.
(Peas--Fertilizers and manures) (Molybdenum--Physiological effect)

L 05117-67 EWT(1) RO

ACC NR: AP6030239 (av) SOURCE CODE: UR/0394/66/004/007/0022/0027

AUTHOR: Merezhinskiy, Yu. G.; Mel'nichuk, A. S.; Martynenko, V. I.; Ushakova, L. T. /6
LC

ORG: Ukrainian Scientific Research Institute of Agriculture (Ukrainskiy nauchno-issledovatel'skiy institut zemledeliya)

TITLE: Herbicides,^b defoliation and dessication agents and plant growth regulators. Aftereffects of simazine and atrazine on weeds and crops

SOURCE: Khimiya v sel'skom khozyaystve, v. 4, no. 7, 1966, 22-27

TOPIC TAGS: herbicide, agriculture, simazine, atrazine/fodder beans, /ONK-B tractor sprayer

ABSTRACT: Experiments were conducted to determine the after-effects of simazine and atrazine on weeds and crops in areas bordering the Polesye region and the Ukrainian forest-steppe. It was found that simazine and atrazine preserve their toxicity in the soil for a year or more, and affect weeds and crops. The after-effects of the herbicides last a shorter time on light soils, poor in organic matter. Sugar beets, sunflowers, barley, and oats were found to be the most sensitive to simazine and atrazine in the second year after sprayings of 2 kg/ha

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UDC: 632. 954. 633

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ACC NR: AP6030239

and more. Millet, fodder beans, peas, lupine and potatoes were the most resistant. Atrazine maintains its toxicity for almost as long as simazine, but the effects of atrazine on crops are more evident, especially during years with insufficient precipitation, and in heavy soils, rich in organic matter. Corn, millet, fodder beans, peas, lupine, potatoes and flax may be sown on the second year after spraying with 2 kg/ha and even smaller doses of simazine and atrazine.
Orig. art. has: 6 tables. [W.A.S.] [GC]

SUB CODE: 02, 06 / SUBM DATE: 02Jul65 / ORIG REF: 021 /

Card 2/2 Rf

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8"

MARTYNEKIO, V.N., inshener.

Advanced technology in freight stations. Zhel.dor.transp. 37
no.11 N '55.
(MLRA 9:2)
(Railroads--Stations)

ISENTAYEV, ..B. & MARTYNENKO, V.P.

Best ways of cutting down the cost of drilling for petroleum and gas.
Vest. AN Kazakh. SSR 21 no.6:47-52 Je '65. (MIRA 18;7)

MARTINICO, V., and I. - t. Sci... } "The [redacted] was
effected in the [redacted] by [redacted] [redacted] [redacted]
order." May, 1954. CIA, All Information [redacted] [redacted] [redacted]
of Anti-Intel. Inst. [redacted] [redacted] [redacted] [redacted], [redacted]
(E, 5-5, 1-1)

- 8 -

AUTHOR: Martynenko, V.... GOV/41-10.3-1/1A

TITLE: Some Metric Geometries the Absolute of Which is a Curve of Third Order (Nekotoryye metricheskiye geometrii, absolyutem kotorikh yavlyayetsya krivaya 3-go poryadka)

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1958, Vol 10, Nr 3.
pp 251 - 260 (USSR)

ABSTRACT: The author considers geometries which are constructed as follows: As the absolute the curve $x^3 - 3y^2 = 0$ or $x^3 + 3xy - 3y^2 = 0$ or $y^3 - x^3 + 3x^2 = 0$ or $x^3 - 3xy - 1 = 0$ or $x^3 + y^3 - 3xy = 0$ or $y(x^2 - y) = 0$ is taken. Then the length and the angle are defined so that they remain invariant for arbitrary projective transformations which map the absolute onto itself. Combining different definitions of length and angle the author obtains for every absolute a series of possible geometries.

SUBMITTED: There are 4 references, 3 of which are Soviet, and 1 is French.
September 21, 1957 (Kiev)

Card 1/1

10(1)
AUTHOR:

Martynenko, V.S. (Kiev)

SCV/41-11-1-15/1

TITLE:

On the Cases of Coincidence of the Hyperbolic Angular Value
in the Lobachevskiy Plane With the Euclidean Angular Value
the Beltrami Circle

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1959, Vol 11, Nr 1,
pp 109-110 (USSR)

ABSTRACT: Let O' be a point of the Beltrami circle different from the
center O . Let K and P be two points on the periphery of the
circle. Let the hyperbolic value Ψ of the $\angle K O' P$ be identical
with the Euclidean value Ψ_e :

(1) $\Psi_e = \Psi$.

Let $A'H$ be the bisector of $\angle KO'P$, let H lie on the periphery
of the circle. In $A'H$ from O' the straight line $A'A$ with the
Euclidean length $\operatorname{tg} \Psi_e$ is marked off. The author determines the

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On the Cases of Coincidence of the Hyperbolic
Angular Value in the Lobachevskiy Plane With the
Euclidean Angular Value on the Beltrami Circle

SUV 41-11-1-10-12

geometric locus of all points A for all angles in Ω' and Ω'' is the
(1). In a rectangular coordinate system related to Ω' the
geometric locus is

$$(x^2 - y^2)^2 [(1+m)^2(x^2 + y^2) + 4m] - 4(1-m)^2 x^2 y^2 = 0$$

(x -axis identical with OO').

Transl.: September 21, 1957

Card 2.2

MARTYNENKO, V.S.

One property of the poloconic of a straight line relative to a
curve of the third order. Dop.AN URSR no.2:150-152 '61.

(MIRA 14:2)

1. Kiyevskiy politekhnicheskiy institut. Predstavлено akademikom
AN USSR B.V.Gnedenko.

(Geometry, Analytic)

MARTYRENKO, Vladimir Gennadievich; TURCHENOK, Valerii Vasil'evich;
retcerzert; TEPETSUCHENKO, ...; ...; ...
KOSTENKO, Yuliia, ...;

[Operational manual] Operational manual [for] ...
Izd-vo Kievskogo gos. univ., 1977. Transl. by CIA [agent]

L 14433-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m)-6 IJP(c) WW/EM
ACC NR: AP6002644 SOURCE CODE: UR/0021/65/000/011/1438/1443

AUTHOR: Kil'chevs'kyy, M. O. -- Kil'chevskiy, N. A. (Corresponding member AN UkrSSR);
Komisarova, H. I. -- Komissarova, G. L.; Martynenko, V. S.

ORG: Institute of Mechanics, AN UkrSSR (Instytut mehaniki AN URSR)

TITLE: Nonstationary motion of a viscous liquid in a thin elastic cylindrical tube

SOURCE: AN UkrRSR. Dopovidi, no. 11, 1955, 1438-1443

TOPIC TAGS: hydrodynamics, viscous flow, unsteady flow

ABSTRACT: The authors investigated theoretically the nonstationary motion of viscous incompressible liquids through deformable cylindrical tubes with the law of motion prescribed at the end cross sections of the tube. Tubes under consideration have large critical Reynolds numbers and the wall thickness-to-diameter ratio of the tube is small. It is assumed that at each point under consideration the velocity of the liquid is parallel to the axis of the tube. The solution is in the form of an approximate expression through special kinds of polynomials the coefficients of which are found by means of the least square method. Orig. art. has: 35 formulas.

SUB CODE: 20 / SUBM DATE: 12Feb65 / ORIG REF: 001

Card 1/13 V.K.

"APPROVED FOR RELEASE: 06/14/2000

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WATERMARK

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032610019-8"

KOZHEVNIKOV, S.N.; KOKLENKO, A.K.; KOS'KO, I.K.; MARTYNNENKO, V.V.; RASKIN, Ya.M.;
TSKHHNOVICH, L.I.

Instruments for the testing of machinery. Trudy Sem.teor.mash. 13 no.51:
86-111 '53. (MLRA 7:1)
(Engineering instruments) (Machinery--Testing)

ZMIYEVSKIY, P.I. LAVOVSKIY, V.V.

Opravlenie po voprosam nefti i gaza. Meltsev. I neftegazim.
1970-1971.

1. Volgogradskiy naftogradnaya bytovaya i neftegazim. Neftegazim
nauchno-issledovatel'skiy inst. po nefti i gaza.

MARTYNNENKO, V. V.

5
7

K.A. Lyubarskii, V.V. Martynenko

Duplication of meteor. phenomena with projection lamp

All Union Astronomic-Geodetic Society-Bulletin Moscow

9(16), 1950, 20-22

From: Monthly list of Russian Accessions, Aug. 1951, Vo. 4, No. 5, p. 27
(Trans. Cop.)

GORVAN', I.S.; MARTYNNENKO, V.V.; SHONOV, V.P.

Geminids in 1950. Biul. VAGO no.11:22-23 '52.

(MLRA 6:6)

1. Simferopol'skoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo obshchestva, Simferopol'skoye obshchestvo yunykh lyubiteley astronomii.
(Meteors)

MARTYNIENKO, V.V.; PIAKHOV, Yu.V.; TEYFEL', V.G.

Izrads in 1952. Biul. VAGO no.16: 28-33 '55.

(MLRA 8:6)

1. Moskovskoye otdeleniye VAGO, meteornyy otdel; Gor'-
kovskoye otdeleniye VAGO, sektsiya nablyudateley; Sim-
feropol'skoye otdeleniye VAGO, Meteornaya stantsiya imeni
G.O. Zateyshchikova pri Krymskoy statsii yunikh tekhnikov.
(Meteors--April)

MARTYNENKO, V.V.

Observations of Perseids in 1956. Astron.tsirk.no.173:24 O 1956.
(MLRA 10:1)

1. Predsedatel' Simferopol'skogo otdeleniya Vsesoyuznogo astronomo-
geodesicheskogo obshchestva.
(Meteors. August)

MARTYNNENKO, V. ✓

Marking time on negatives of nonautomatic and semiautomatic
guided cameras. Astron.tsirk. no.174:21-22 N '56.

(MIRA 10:3)

1. Meteorinaya stantsiya im Zateyshchikova, Semfiropol'skaya.
(Meteors) (Astronomical photography)

MARTYNESENKO, V.V.; GAPOTCHENKO, A.G.

Observations of noctilucent clouds on June 29, 1957. Astron. tsir.
(MIRA 11:6)
no.187:25 D '57.
(Clouds)

SOV/35-59-9-7261

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, Nr 9, p 62 (USSR)

AUTHOR: Martynenko, V.V.

TITLE: A Burst of Activity in the α -Lyrid Meteoric Stream

PERIODICAL: Astron. tsirkulyar, 1958, October 16, Nr .36, pp 15 - 17

ABSTRACT: A burst of activity in the α -Lyr meteoric stream which was active from 9 - 10 July to 27 July 1958 was observed. The observations were carried out by the multiple counting method in the zenith region, 70° in diameter, of the sky. There is a citation of results of the observations of usual meteors and telemeteors and the position of the radiant calculated from them. In this region of the sky 4 radiants with the coordinates $\alpha = 270 - 279^\circ$, $\delta = +35 - +42^\circ$ have been noted up to 1959.

N.P.K.

Card 1/1

MARTYNNENKO, V.V.; GOL'DHERRG, B.I.

G.O. Zateishchikov Meteor Station in Simferopol'. Biul. VAGO
no.22:42-46 '58. (MIRA 11:6)

1.Zaveduyushchiy Simferopol'skoy meteornoy stantsiyey im. Zateyshchikova
(for Martynenko). 2.Uchenyy sekretar' Simferopol'skoy meteornoy
stantsii im. Zateynikova (for Gol'berg).
(Simferopol'--Meteors)

MARTYNEKO, V.

Meteor hunters. Znan.ta pratsia no.7:6-8 J1 '59.
(MIRA 13:2)
(Meteors)

MARTYNEKO, V.

Simferopol' Society of Amateur Astronomers. IUn.tekh. 4 no.6:56-
60 Je '60. (MIRA 13:9)
(Simferopol'--Astronomy--Societies)

MARTYNEKO, V.

Meteor patrol. IUn. tekhn. 5 no. 11:74-77 N '60. (MIRA 1;:12)
(Astronomy--Observations) (Meteors)

S/035/61/006/011/021/02E
A001/A1C1

AUTHOR: Martynenko, V. V.

TITLE: Observations at the Simferopol' meteor station imeni G. O. Zateyshchikov during the International Geophysical Year

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 11, 1961, 74, abstract 11A538 ("Byul. Vses. astron.-geod. o-va", 1960, no. 2, (33), 56 - 63)

TEXT: Information is given on the activities of the Simferopol' meteor station during the IGY. Visual observations of meteors were conducted during almost all meteorological intervals, regular world and meteor days of the IGY calendar. 450 hours of observations were performed in 158 nights. 18,300 meteors were recorded in the circumzenith region by the method of multiple counting. About 3,000 meteors were observed according to the program-maximum. The average hourly number of observed meteors during IGY was 41. A graph of relation between the coefficient of detectability and meteor stellar magnitude was plotted on the basis of observations of a six-observer team during 6 nights. Spectra of several meteors

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Observations at the...

S/035/61/006/011/021/02
AOC1/AIC1

were obtained, and ~20 observations of drifts of meteoric trails were made

P. Babadzhanov

{Abstracter's note: Complete translation}

Card 2/2

ZOTKIN, I.T. Prinimali uchebniye: MARTYENKO, V.V.; SIMAKINA, Ye.G.; TERENT'YEVA, A.K.; KHOTINOV, B.I. FADDEISKII, V.V., otv.red.; HEGKGAUT, V.G., red.izd-va; YERIPANOVA, L., tekhn.red.

[Instructions for observing meteors] Instruktsiia dlia nabliu-
denii meteorov. Moskva, Izd-vo Akad.nauk SSSR, 1961. 52 p.
(MIRA 14:4)
(Meteors)

S/035/62/000/C1C/C61/128
AOC1/A101

AUTHORS: Zatkin, I.T., Martynenko, V. V.

TITLE: Visual observations of meteors at Simferopol'

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962,
65 - 66, abstract 10A465. (In collection: "Ionosfern. issled.
(meteory)", no. 8", M., AN SSSR, 1962, 97 - 101, English sum-
mary)

TEXT: During IGY, a group of VAGO members counted visually meteors. Several observers simultaneously observed the sky region around the zenith, bounded by a circular contour. This method permits determination of the probability of detecting a meteor and estimation of the true number of meteors. Observations according to such a program were conducted at Simferopol', Moscow, Ryazan', Sverdlovsk, Alma-Ata, Dushanbo and Kiyev. Altogether approximately 22,000 meteors were recorded.

[Abstracter's note: Complete translation]

Authors' summary

Card 1/1

MARYNENKO, V. V.

On a "sterner" path. Sum. I visit. Inc. 37-69 My life less.

卷之三

1. Председатель Ставки Главного штаба и представители Всесоюзного военного генералишеского отхода.

MARTYNENKO, Ya.

Grinding and polishing machines at the groats shop of the Kerch Grain Products Combine. Muk.-elev. prom. 29 no.3:10-11 Mr '63.
(MIRA 16:9)
1. Glavnnyy inzh. Kerchenskogo kombinata khleboproduktov.

MARTYNENKO, Ya.

Parts of a grinding and polishing machine. Muk.-elev. prom. 29 no.11:
27-28 N '63. (MIRA 17:2)

1. Glavnnyy inzh. Kerchenskogo kombinata khleboproduktov.

MARTYNNENKO, YE. A.

USSR/Chemistry - Dioxane
Sulfur Trioxide

Dec 48

"Cryoscopic Study of Solutions of Sulfuric Anhydride in Dioxane," Ya. F. Mezhenny, Ye. A. Martynenko, Chair of Chem, Kiev Agr Inst, 2 $\frac{1}{4}$ pp

"Zhur Obshch Khim" Vol XVIII, No 12

Investigated solutions of SO₃ in dioxane by the cryoscopic method, and found the molecular weight of the solution to be about 160, depending on the concentration of the solution. The dissolved SO₃ is polymerized into S₂O₆.

PA 67/49T42

45372
S/056/63/044/001/038/067
B102/B186

24,6600
24,2120

AUTHORS:

Martynenko, Yu. V., Firsov, O. B., Chibisov, M. I.

TITLE:

Slow-electron scattering from atoms

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44,
no. 1, 1963, 225 - 229

TEXT: The energy dependence of the total scattering cross section for electrons of $E \leq 1$ ev is calculated for the case of a dipole field of the scatterer atom. The interaction potential is assumed to be of the form $U = -\alpha e^2 / 2r^4$, where α is the polarizability and a Bohr's radius. On introducing $\varphi(r) = rR(r)$, where $R(r)$ is the radial part of the wave function with $l = 0$, and $x = r\alpha^{-1/4}(k/a)^{1/2}$, and $\beta^2 = ka/\alpha$ one obtains a Schrödinger equation of the form $\varphi'' + \beta^2(1+1/x^4)\varphi = 0$; (3). For $x \gg 1$, $\varphi = A \sin(\beta x + \delta_0)$ where δ_0 is the zero scattering phase. Higher phases are neglected. (3) is invariant with respect to the substitutions $x = 1/\xi$ and $\varphi = \psi/\xi$. Then for $x \ll 1$ and $\xi \gg 1$ one obtains $\psi = B \sin(\beta\xi + \gamma)$ and $\varphi = Bx \sin(\beta/x + \gamma)$ and

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Slow-electron scattering from atoms

8/056/63/044/001/038/067
B102/B186

the solution of (3) is obtained as

$$x < 1 \quad \varphi = Bx \left[\sin\left(\frac{\beta}{x} + \gamma\right) + \beta \int_{1/x}^{\infty} \sin \beta \left(\frac{1}{x} - \xi \right) \sin (\beta \xi + \gamma) \frac{d\xi}{\xi^2} \right]. \quad (5)$$

$$x > 1$$

$$\varphi = A \left[\sin (\beta x + \delta_0) + \beta \int_{-\infty}^{\infty} \sin \beta (x - x') \sin (\beta x' + \delta_0) \frac{dx'}{x'^2} \right]. \quad (6)$$

where β^2/x^4 is considered as a perturbation. After some transformations one obtains

$$\operatorname{tg} \delta_0 = [A(\beta) + \operatorname{tg} \gamma] / [B(\beta) \operatorname{tg} \gamma - 1]. \quad (7)$$

$\beta =$	0,2	0,4	0,6	0,8	1	1,2	1,4
$A =$	-25,33	-6,865	-3,27	-1,91	-1,201	-0,748	-0,36
$B =$	-637,3	-45,47	-10,87	-4,29	-2,173	-1,225	-0,70

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Slow-electron scattering from atoms

8/056/63/044/001/038/067
B102/B186

For $x \gg 1$ and $\varphi = \sin(\beta x + \delta_0)$, $\delta_0 = -1.78 - \gamma + k^2$ and $A = \tan 1.7\beta$ for $\beta > 1.8$ and $B = -\tan 1.7\beta$ for $\beta > 1.8$. The cross section is then calculated from the relation $\sigma = 4\pi \tan^2 \delta_0 / k^2 (1 + \tan^2 \delta_0)$. γ can either be determined from a point of the $\sigma(E)$ curve or from the binding energy of the negative ion. The mean electron collision frequency in the gas is determined from

$$\overline{\sigma v} = \frac{4 \sqrt{T}}{\sqrt{2\pi m}} \int_0^\infty \sigma(Tx) x e^{-x} dx, \quad (18)$$

where $x = E/T$; averaging is carried out over the Maxwell distribution. The results of numerical examples are in good agreement with the experimental $\sigma(E)$ curves. There are 1 figure and 1 table.

SUBMITTED: July 12, 1962

Card 3/3

MARTYNENKO, Yu.V.

Theory of simple spin wave scattering. Fiz. zhurn. SSSR, v. 41, No. 1, p. 109
Jl '64. (MIA 17:10)

L 17121-65 EPF(n)-2/EPA(w)-2/EWG(k)/EWT(l)/EWA/EPA(sp)-2/T Pn-4/Pz-6/
Pab-10 AFWL/ESD(r)/IJP(c) AT
ACCESSION NR: AP5000647

S/0181/64/008/012/3529/3534

AUTHOR: Martynenko, Yu. V.

TITLE: Dependence of the sputtering coefficient on the ion energy

SOURCE: Fizika tverdogo tverdogo telia, v. 6, no. 12, 1984, 3529-3534

TOPIC TAGS: ion sputtering, sputtering coefficient, single crystal, polycrystal

ABSTRACT: The formula derived in an earlier paper (FTT v. 6, 2003, 1984) for the sputtering coefficient of single crystals by ions with energies from several to several dozen keV is generalized in the present paper to include higher ion energies, when the interaction potential deviates from the r^{-2} proportionality and approaches the Coulomb value. The new formula shows a weak decrease of S with increasing energy, a weak increase in the sputtering coefficient with increasing energy, and also an increase in the anisotropy of the sputtering coefficient. By averaging the derived expression over all the structural factors (the cosine of the ion angle of incidence, the shadow radius, the distance between the screening and the screened atoms and the number of focusons

Card 1/2

L-17121-65

ACCESSION NR: AP5000647

produced by the incident ions), a formula is derived for the sputtering coefficient of polycrystals. In spite of many simplifications made during the course of the averaging, the formula is in good agreement with the experimental data. "In conclusion I thank O. B. Firsov for interest in the work and useful advice." Orig. art. has: 3 figures and 11 formulas.

ASSOCIATION: None

SUBMITTED: 04May64

ENCL: 00

SUB CODE: SS MP

NR REF SOV: 005

OTHER: 009

Card 3/2

L 15125-65 EEG(b)-2/EPA(w)-2/EWG(k)/EWT(1)/EEG(t)/EPA(sp)-2/T/EWA(m)-2
P1-4/Po-4/Pz-5/Pab-10 ESD(t)/ESD(gs)/RAEM(c)/AEDC(b)/SSD/SSD(b)/AFWL/ASD(a)-5
ASD(r)-2/ASD(p)-3/AFETR/IJP(c) AT/DM
ACCESSION NR: AP4045335 S/0089/64/017/003/0211/0215

AUTHOR: Marty*nenko, Yu. V.; Sobolev, R. I.

B

TITLE: Magnetic field of the mirror configuration which increases along the radius

SOURCE: Atomnaya energiya, v. 17, no. 3, 1964, 211-215

TOPIC TAGS: plasma, magnetic field, nuclear fusion, thermonuclear reaction, magnetic plasma trap, magnetic mirror

ABSTRACT: In the recent paper (Yu. V. Gott et al, Yaderny*y synthesis, Supplement, part 3, 1045 (1962)), the preliminary experiments were described on confining plasma in an adiabatic trap with a magnetic field which is increasing in both the longitudinal and in radial directions. Such a field is obtained by a superposition of the field of the usual trap with magnetic mirror by a system of linear conductors symmetrically located around the longitudinal axis. The currents in the neighboring conductors are opposite. In the present paper, a simplified combination field is considered with 4, 6, and 8 conductors. The results of

Card 1/2

L 15125-65

ACCESSION NR: AP4045335

the investigation were used for the computation of the establishment PR-3. The authors are grateful to M. S. Ioffe and O. B. Firsov for useful comments. Orig. art. has: 3 figures, 11 equations

ASSOCIATION: None

SUBMITTED: 02Sep63

ENCL: 00

SUB CODE: ME, EM

NO REF Sov: 004

OTHER: 002

Corr: 2/2

L 22521-66 EWT(1)/T IJP(c) GG/AT
ACC NR: AP6009637

SOURCE CODE: UR/0181/66/008/003/0637/0642

AUTHOR: Martynenko, Yu. V.

5/1
54

ORG: none

E

TITLE: Effect of crystal structure of the target on ion-electron emission

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 637-642

21

TOPIC TAGS: ion emission, electron emission, single crystal, crystal structure, collision cross section, ion bombardment

ABSTRACT: The purpose of the article is to present a theoretical explanation for the nonmonotonic character of the dependence of the coefficient of ion-electron emission from a single crystal on the angle of incidence. To this end, a formula is derived for this coefficient under the assumption that the main emission mechanism is the one proposed by E. S. Parilis (Dissertation Abstract, Institute of Nuclear Physics AN UzSSR, Tashkent, 1963), wherein it is proposed that emission is the result of excitation of the electrons of the internal shells, which are weakly collectivized and whose excitation is such that collision can produce either ionization of the atomic remainder of the target atom or of the incident ion itself. The dependence of the probability of collision between the ions and the atoms of

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2

L 22521-66

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the upper layer of the target on the angle of incidence of the ions is taken into account, and it is shown theoretically that the screening of the lower atomic layers by the upper ones actually can explain the anisotropy of the emission coefficient. The influence of the thermal vibrations of the target atom on the screening of the lower atomic layers by the upper ones during ion bombardment is considered and it is shown that in the case of ion-electron emission, the plots of the emission coefficient against the angle become much smoother at sufficiently high temperature, in contrast with the behavior in the analogous sputtering mechanism. Experimental data are presented for bombardment of copper with 30-kev Ar⁺ ions and are reconciled with the theory. The author thanks O. B. Firsov for continuous interest in the work and useful advice and V. A. Molchanov for valuable remarks. Orig. art. has: 1 figure and 11 formulas.

SUB CODE: 20/ SUBM DATE: 09Mar65/ ORIG REF: 007/ OTH REF: 004

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